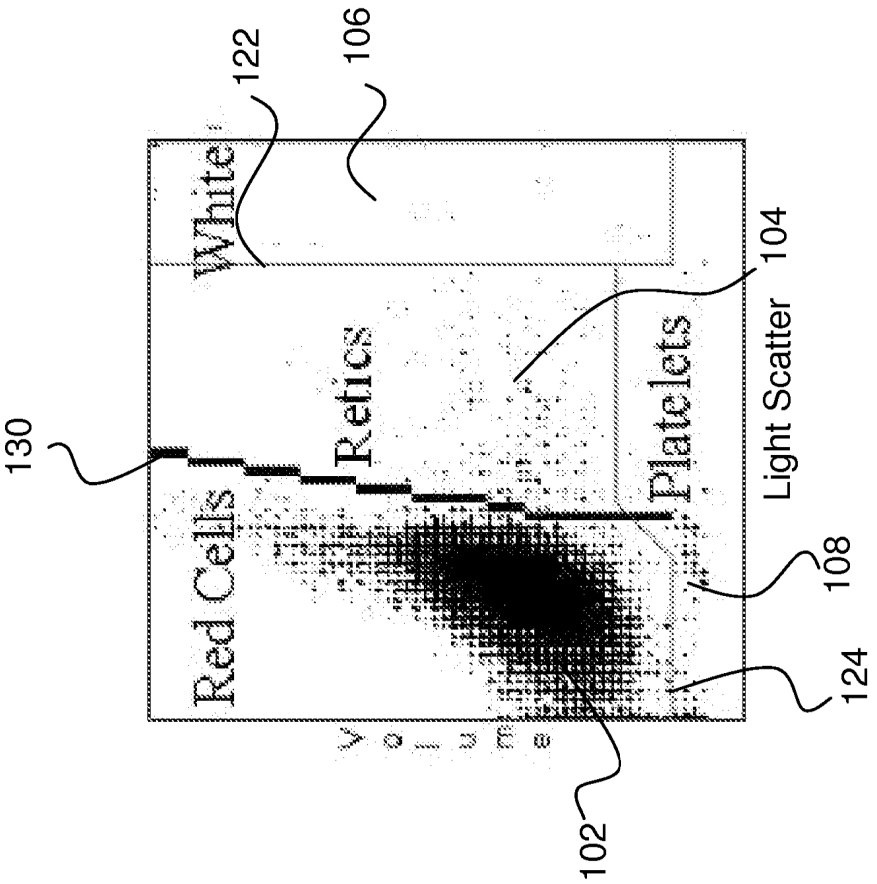

White
Retics
Platelets
Red Cells
Light Scatter
Volume
130
122
106
104
108
124
102

FIG. 1

FIG. 2

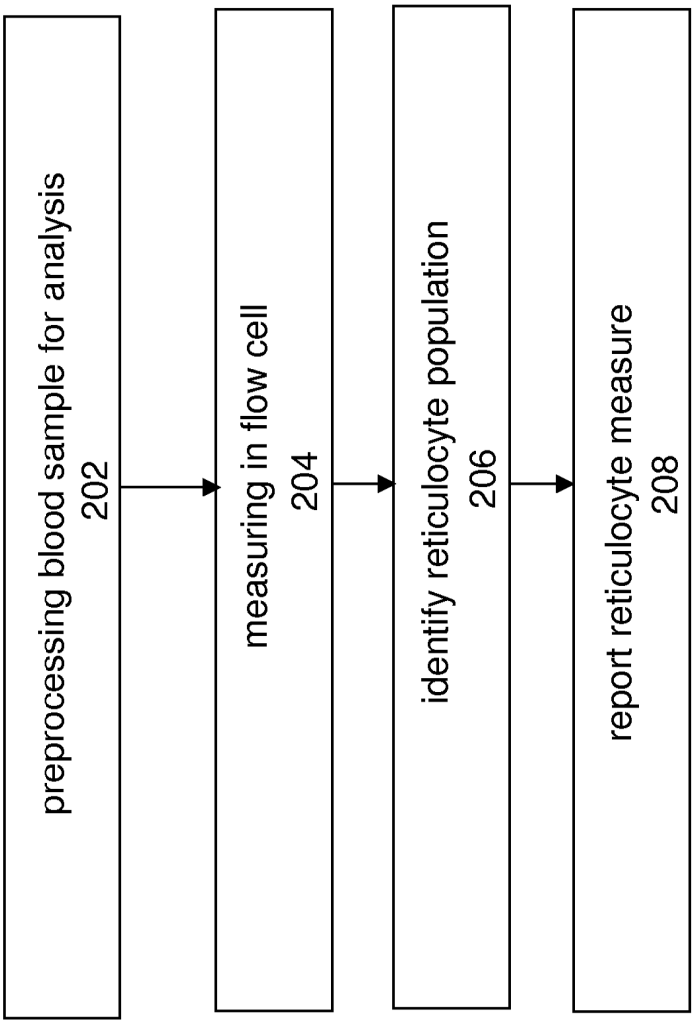

preprocessing blood sample for analysis
202
measuring in flow cell
204
identify reticulocyte population
206
report reticulocyte measure
208

FIG. 3

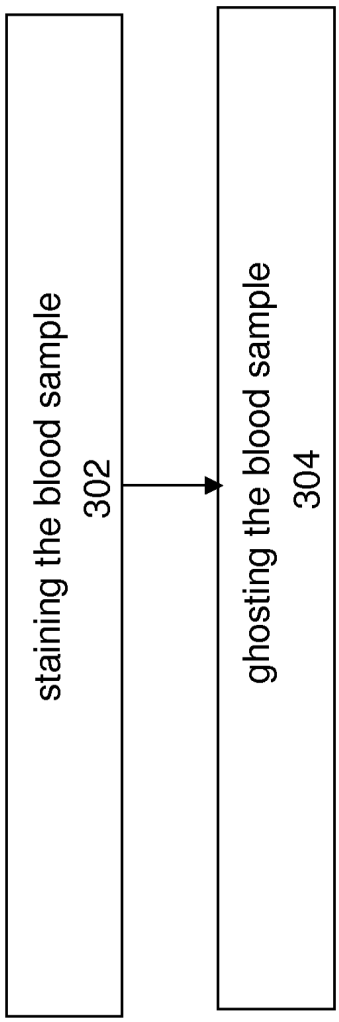
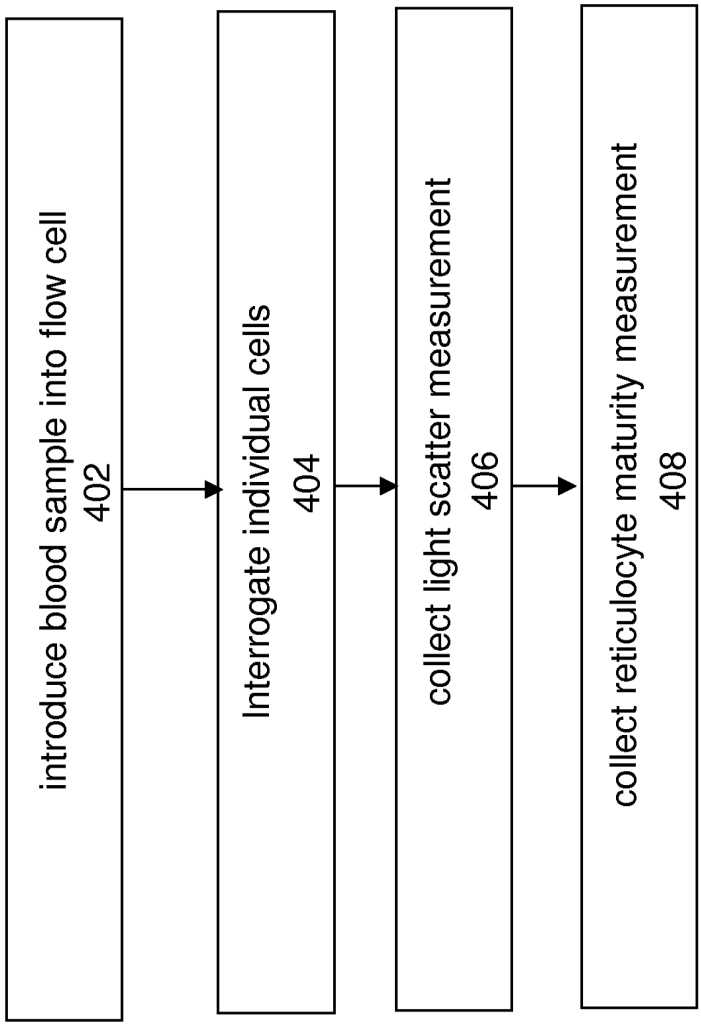

staining the blood sample
302
ghosting the blood sample
304

FIG. 4


introduce blood sample into flow cell
402
Interrogate individual cells
404
collect light scatter measurement
406
collect reticulocyte maturity measurement
408

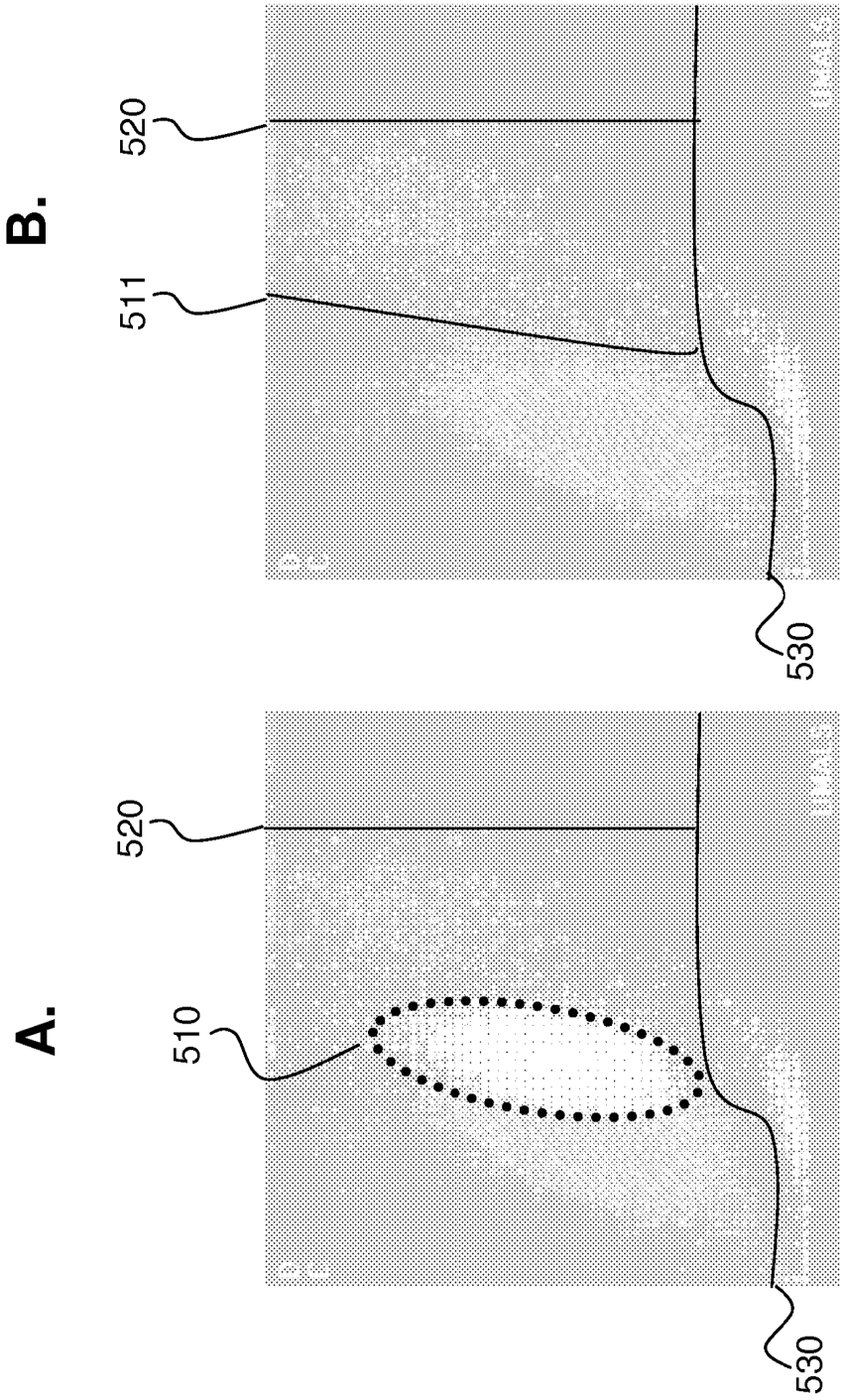


FIG. 5

FIG. 6

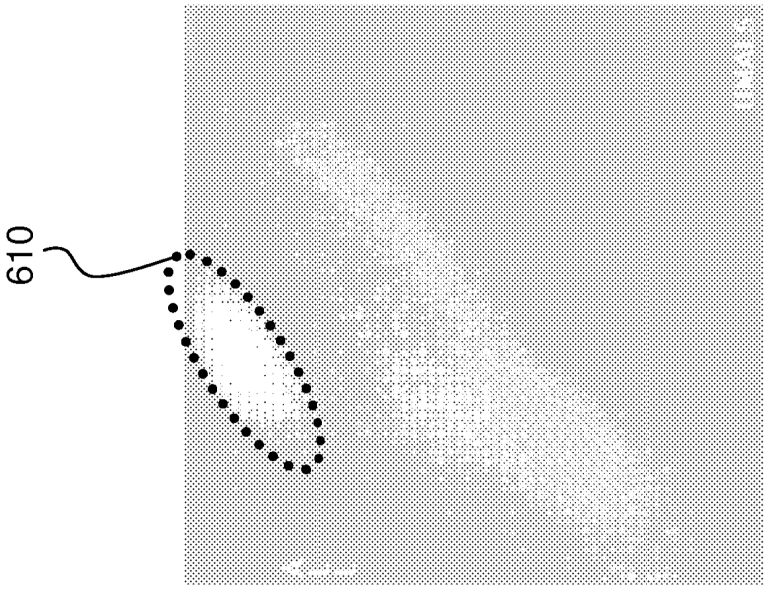


FIG. 7

introduce blood sample into flow cell
802
interrogate individual cells
804
collect axial light loss measurement
806
collect light scatter measurement
810
enumerate "hard-to-ghost" cells
813
filter-out "hard-to-ghost" events based on
axial light loss measure
812
report reticulocyte measurement
814

FIG. 8

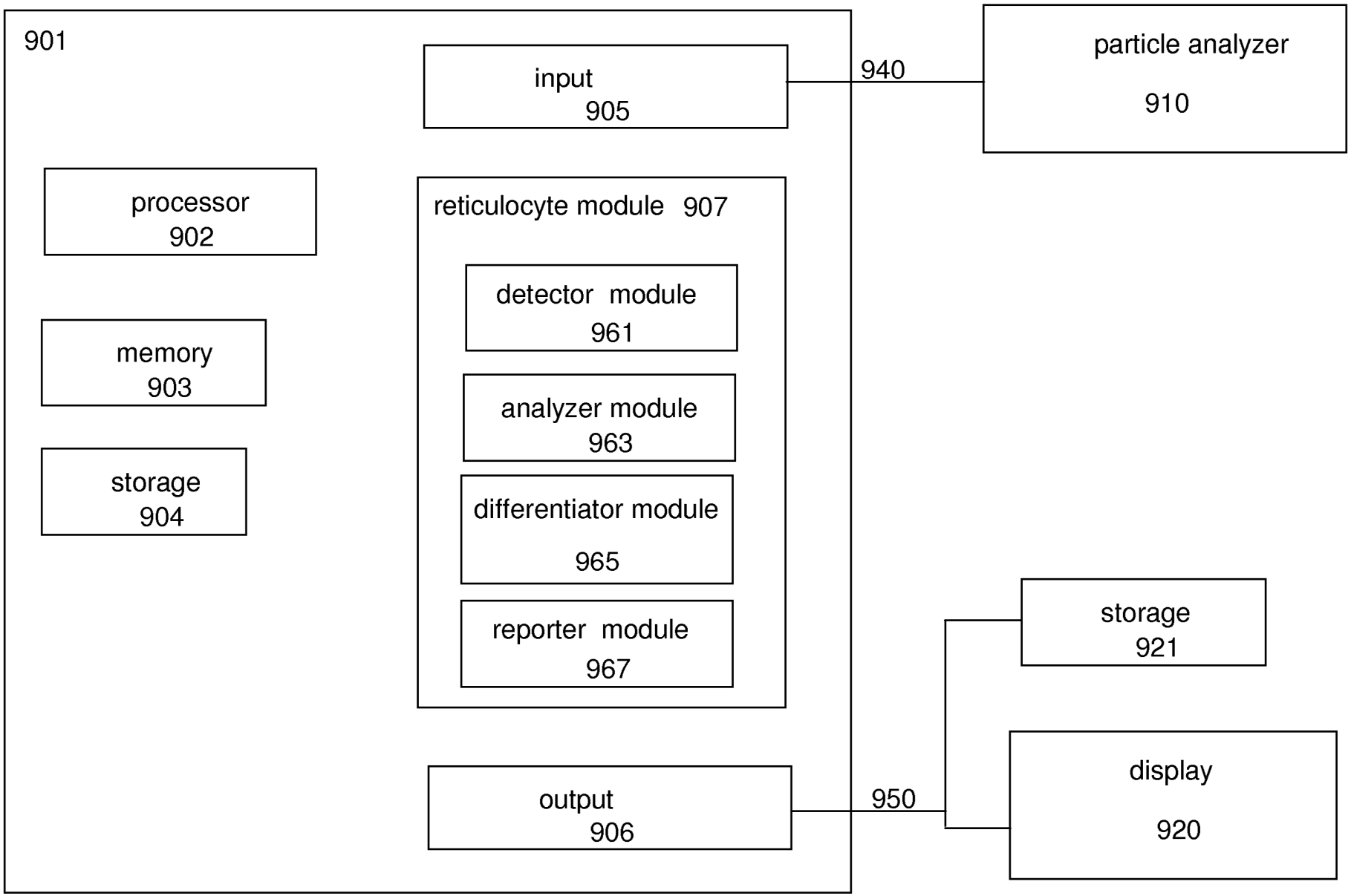

901
input
905
940
particle analyzer
910
processor
902
reticulocyte module 907
detector module
961
memory
903
analyzer module
963
storage
904
differentiator module
965
reporter module
967
storage
921
display
920
output
906
950

FIG. 9

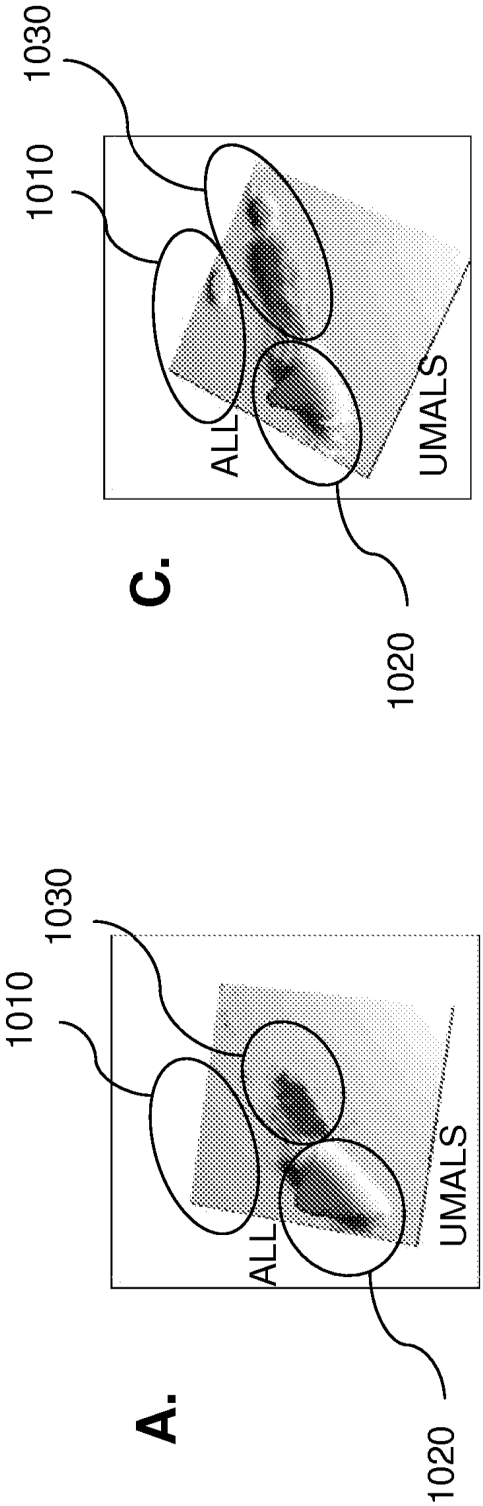
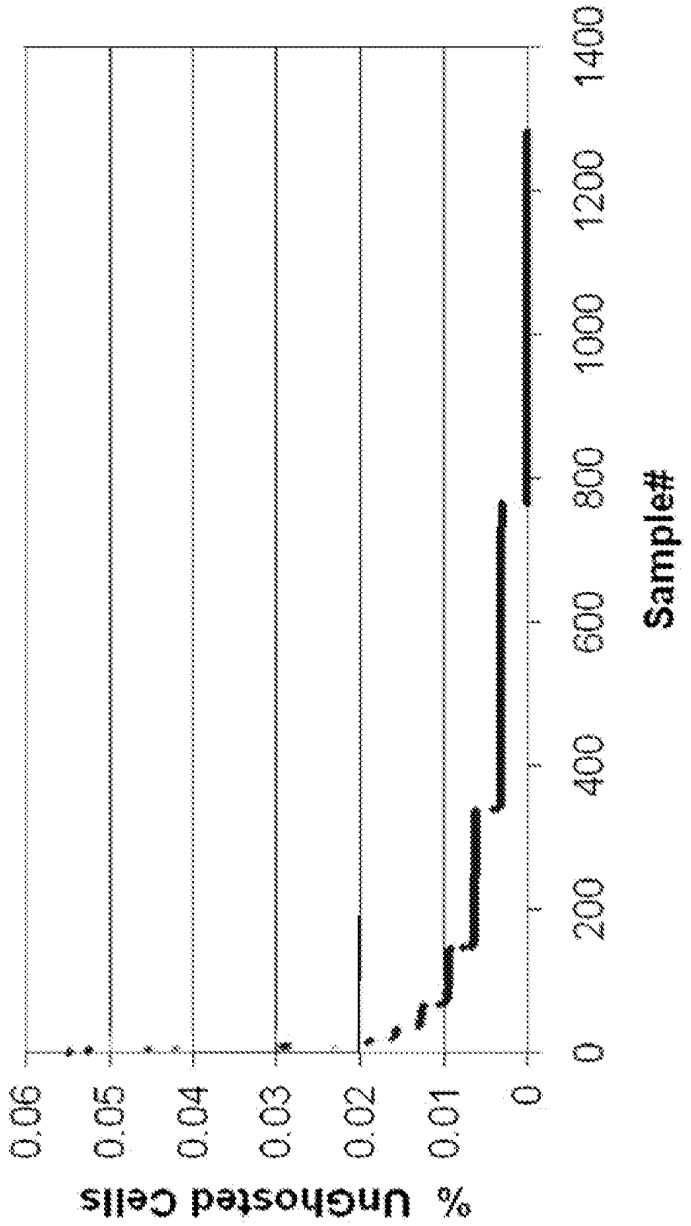

A.
1010
1030
ALL
UMALS
1020
B.
1010
1030
ALL
UMALS
1020
C.
1010
1030
ALL
UMALS
1020

FIG. 10

FIG. 11


% Unghosted cells
0.06
0.05
0.04
0.03
0.02
0.01
0
0
200
400
600
800
1000
1200
1400
Sample#

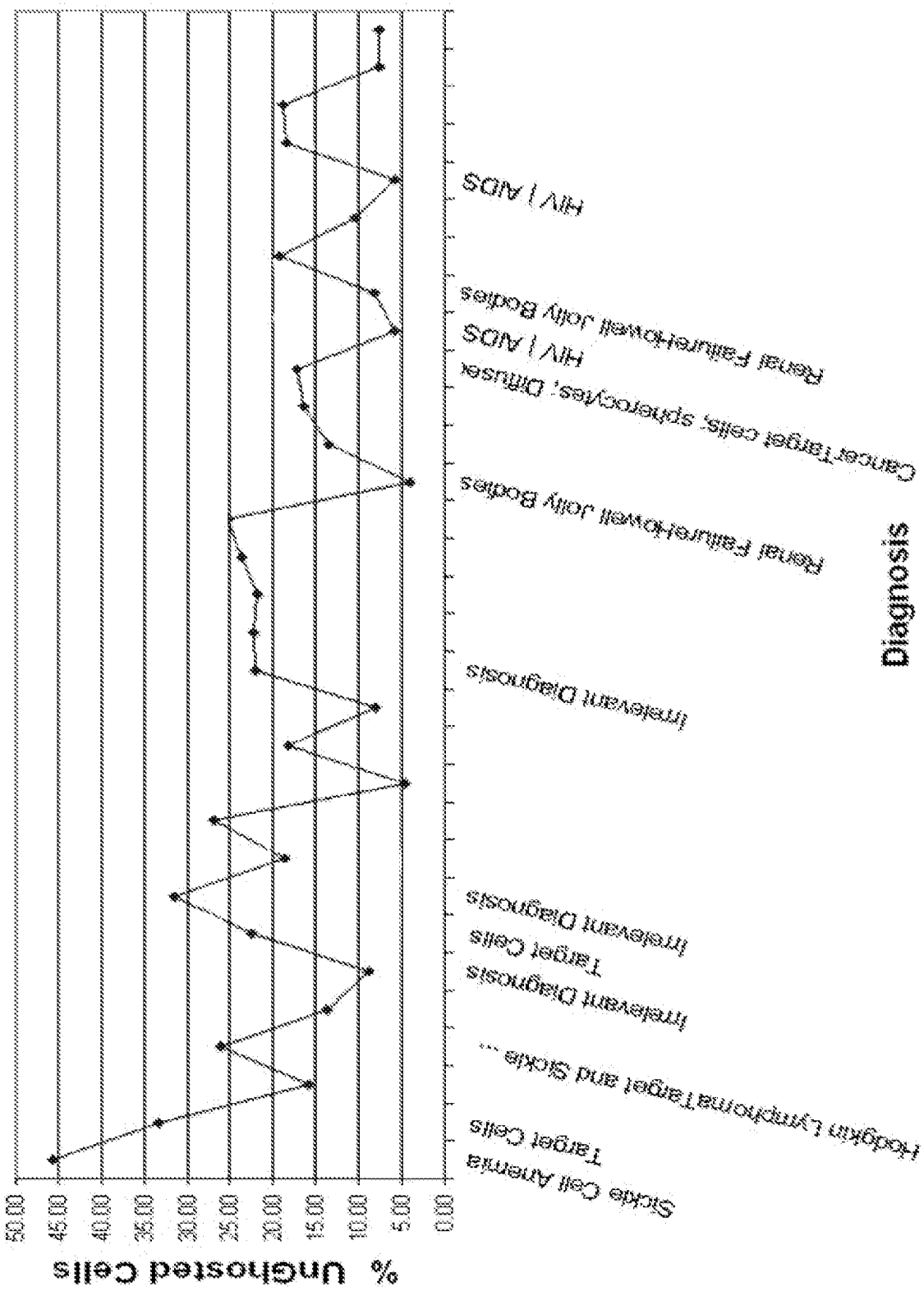

% Unghosted cells
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
Sickle Cell Anemia
Target Cells
Hodgkin Lymphoma Target and Sickle ...
Irrelevant Diagnosis
Target Cells
Irrelevant Diagnosis
Irrelevant Diagnosis
Renal Failure-Howell Jolly Bodies
Cancer Target cells, spherocytes, Diffuse
HIV / AIDS
Renal Failure-Howell Jolly Bodies
HIV / AIDS
Diagnosis

FIG. 12